

## CLAIMS

We claim:

1. A method for the optimization of a messaging system comprising a sending node and at least one receiving node, within a data network with a limited resource, comprising the steps of

- a) assigning messages a prioritization value at said sending node;
- b) identifying selected messages with a highest said prioritization value at said sending node, and
- c) delivering said selected messages to an appropriate said receiving node, until said limited resource is exhausted.

2. The method of claim 1, further comprising the step of storing said selected messages at said receiving node prior to a user request to collect selected messages from said messaging system, thereby proactively buffering selected messages at said receiving node.

3. The method of claim 1, further comprising the step of decomposing messages into message elements at said sending node, and then processing each said message element as an independent message.

4. The method of claim 3, wherein decomposition divides messages into said message elements comprising

- a) a header comprising at least a sender messaging address identifier and a message subject;
- b) a first message section, comprising no more than a predetermined amount of data, and
- c) a second message section.

5. The method of claim 3, wherein said prioritization value depends upon the type of said message element.

6. The method of claim 1, wherein the full text of said message is provided to a set of messaging nodes that is a smaller subset of the messaging nodes provided with a header of said message.

7. The method of claim 1, wherein said limited resource comprises communications time between said sending node and said receiving node.

8. The method of claim 1, wherein said limited resource comprises collective communications bandwidth from said sending node.

9. The method of claim 1, wherein said limited resource comprises storage capacity on said receiving node.

10. The method of claim 1, wherein said prioritization value depends upon the age of said message.

11. The method of claim 1, wherein said prioritization value depends upon the service level of the sender of said message.

12. The method of claim 1, wherein said prioritization value depends upon the service level of the recipient of said message.

13. The method of claim 1, wherein said prioritization value depends upon an association table value for relating said receiving node and a message recipient.

14. The method of claim 1, wherein said prioritization value depends upon the payment of a surcharge for the express delivery of said message.

15. The method of claim 1, wherein said prioritization value is greater for administrative messages.

16. The method of claim 1, wherein said prioritization value depends upon the geographic location of said receiving node.

17. The method of claim 1, wherein said prioritization value depends upon the predicted probability based upon prior behavior that said recipient will request the collection of incoming messages at said receiving node.

18. The method of claim 1, wherein said message is provided to said receiving node when said prioritization value exceeds a predetermined threshold.

19. The method of claim 1, wherein said sending node comprises a central server in a messaging system.

20. The method of claim 1, wherein said receiving node comprises a portable messaging unit including user interface means and storage means, operated by a message recipient.